REMARKS

Claims 1-58 are pending in the present application. In a first action dated January 12, 2007, the Examiner rejected all claims under 35 U.S.C. 102(b) as anticipated by D'Amico et al. (US 5,606,729). These rejections have been withdrawn in the present action, dated December 12, 2007 ("Office Action"), with an indication that Applicant's arguments with respect to the first action "have been considered but are moot in view of the new ground(s) of rejection." (Office Action, p. 5.)

In the present Office Action, the original anticipation rejections have simply been replaced by allegations of obviousness over D'Amico in view of Voyer (US 6,952,459). Applicant appreciates the Examiner's consideration of the arguments presented in the response dated April 11, 2007 ("Applicant Response"). However, these arguments are decidedly not moot. The Applicant Response demonstrated that D'Amico fails to discuss or suggest any of the features of the claimed invention. In particular, contrary to the allegations of the present Office Action, D'Amico does not disclose a system and method of measuring noise at a base station in a mobile communication system. D'Amico does not teach defining a periodic silence period for at lest one carrier that is independent of reverse link channel frame boundaries. D'Amico does not teach transmitting silence parameters that define the periodic silence period to mobile stations communicating with the base stations. The arguments presented in the Applicant Response thus appear to have been largely ignored; Applicant respectfully requests reconsideration of those arguments as well as the comments provided herein, and immediate allowance of the pending claims.

"A method of measuring noise at one or more base stations ..."

Claim 1 of the present invention is directed to a method of measuring noise at one or more base stations in a mobile communication system. Independent claim 18 is directed to a

related base station apparatus that includes a receiver configured to measure noise. D'Amico, on the other hand, is completely unrelated to the problem of measuring background noise and interference at a base station. Rather, D'Amico describes a method for estimating signal quality in a mobile receiver. (Col. 1, lines 55-59.)

These are not trivial distinctions. One of the problems addressed by the current invention is how to determine the background noise and interference at a base station receiving simultaneous, unsynchronized transmissions from several mobile stations. Claim 1 defines a method for causing these mobile stations to stop transmitting during a defined periodic silence period, so that the noise may be measured. D'Amico, on the other hand, is concerned with a system for measuring received signal quality at a mobile station. In particular, D'Amico is concerned with measuring signal quality for an analog-modulated signal (see D'Amico col. 8, lines 40-46.) The teachings of D'Amico are completely inapplicable to a method or system for measuring noise at a base station.

"Defining a periodic silence period"

Claim 1 includes a step of "defining a periodic silence period for at least one carrier that is independent of reverse link channel frame boundaries." This is not disclosed in D'Amico.

First, D'Amico makes no mention of periodicity at all. Second, D'Amico does not disclose a period (of any sort) that is independent of reverse link channel frame boundaries. To begin with, D'Amico is concerned with forward link transmissions, since D'Amico is concerned with measuring signal quality at a mobile station. Thus, D'Amico describes the transmission of signals from the "fixed portion," i.e., the base stations, of a wireless system. (*See, e.g.*, D'Amico, col. 2, lines 2-12.) Furthermore, D'Amico teaches nothing with respect to the relationship between its signal quality measurement (SQM) transmissions and any channel frame boundaries. Third, as was discussed in the previously submitted Applicant Response,

the "silence periods" allegedly disclosed by D'Amico are not "silent" at all. In the context of claim 1, the meaning of "silence period" is quite clear – the silence period defines an interval in which mobile stations stop transmitting. In contrast, D'Amico's "silent slots" actually define an interval in which a base station transmits an un-modulated carrier frequency silent. (*See* D'Amico, col. 8 line 62 – col. 9 line 10 and Figs. 5 & 6; Applicant Response, p. 2 lines 7-16.)

"... transmitting silence parameters that define the periodic silence period to mobile stations ..."

The Office Action's citations to D'Amico fail to point out any discussion of "silence parameters that define the periodic silence period." In fact, D'Amico appears to be completely silent on this topic. Naturally, D'Amico also fails to disclose the transmission of these silence parameters to mobile stations.

"...wherein the mobile stations stop transmitting during the silence period ..."

The Office Action admits that D'Amico fails to disclose that mobile stations stop transmitting during the defined periodic silence period. However, the Office Action asserts that Voyer discloses this feature, and that it would have been obvious to combine the teachings of Voyer with those of D'Amico.

Voyer is directed to antenna beam-forming using an array of antennas. D'Amico is directed to a method for obtaining signal quality measurements in a wireless system. It is not at all apparent why a skilled practitioner would combine the teachings of Voyer with those of D'Amico to obtain a completely unrelated method and system for measuring noise at a base station, even if those teachings could be combined in the manner recited in the present claims. The Office Action's conclusory assertion that a skilled practitioner would have done so "for the

purpose of ensuring that an accurate measurement of the noise is obtained" (Office Ation, p. 2) is insufficient to establish a *prima facie* case of obviousness.

In any event, the cited portion of Voyer states simply that noise power and interference at base station can conveniently be estimated "for example during a period of silence of the mobile terminal." This is generally true. Indeed, this is why the present invention defines a method for ensuring that multiple mobile stations stop transmitting at a defined periodic silence period. However, Voyer does not disclose that mobile stations stop transmitting during this defined periodic silence period, and does not cure the deficiencies of D'Amico.

The remaining independent claims

The preceding comments are directly related to the Office Action's rejection of independent claims 1 and 18, which are closely related method and apparatus claims, respectively. The rejections of these claims should be withdrawn for at least the reasons given above.

The Office Action notes that independent claims 35 and 42 also correspond to claim 1, and rejects these claims for the same reasons as for the rejection of claim 1, providing no further discussion. To the extent that claims 35 and 42 do correspond to claim 1, the rejections of these claims are also improper, and should be withdrawn. However, this correspondence is only rough. As a result, the rejections of claims 35 and 42 are improper for additional reasons.

First, claim 35 is directed to a mobile station that receives silence parameters defining a periodic silence period, and which includes a controller operative to shut off the mobile station's transmitter during the periodic silence period. As discussed above, neither D'Amico nor Voyer disclose silence parameters defining a periodic silence period. Similarly, neither reference discloses a mobile station that receives silence parameters, or that includes a controller

operative to shut off a transmitter during the defined period. The rejection of claim 35 should be withdrawn for at least this additional reason.

Claim 42, on the other hand, is directed to a method for measuring noise at a base station, in which non-synchronous yet overlapping signal periods are defined for at least two reverse link channels. This feature is not addressed by the present Office Action, and is not disclosed by D'Amico and Voyer. The rejection of claim 42 should be withdrawn for at least this additional reason.

Independent claim 53 is directed to a communication apparatus that includes a controller operative to determine whether a transmit frame overlaps a silence period and to control the transmitter responsive to that determination. The previously submitted Applicant Response pointed out that this claim was rejected in the first office action on grounds that appeared to be completely unrelated to the claim. (Applicant Response, p. 5.) This appears to have been completely ignored, as the same rejection appears in the current Office Action. The features of claim 53 are thus not addressed in the current Office Action and are in any event not disclosed in the cited references. The rejection of claim 53 should be withdrawn.

The dependent claims

Because the rejections of the independent claims are improper, as demonstrated above, the rejections of the dependent claims are also improper, and should be withdrawn. However, many of the dependent claims are rejected on additional grounds that are unsupported by the cited references. The rejections of these claims should be withdrawn for at least this additional reason.

For instance, with respect to claim 2, the Office Action alleges that D'Amico discloses that the silence parameters include a frequency parameter that indicates the frequency of the silence period, a duration parameter that indicates the duration of the silence period, and a time

reference parameter that provides an absolute time reference for synchronizing silence periods for non-synchronous reverse link channels. (Office Action, pp. 2-3.) In fact, D'Amico discloses nothing of the kind; Applicant is unable to discern any link at all between the cited portion of D'Amico and the subject matter of claim 2.

Similarly, with respect to claim 3, the Office Action alleges that D'Amico discloses that the periodic silence period encompasses portions of at least two consecutive reverse link frames. (Office Action, p. 3.) The cited portion of D'Amico describes details of a computer system; again, Applicant can discern no connection between the cited text and the subject matter of claim 3. The rejections of claims 4, 5, 8, 10, 12, 13, 14, 15, 16, 19, 20, 21, 22, 25, 27, 29, 30, 31, 32, 33, 34, 37, 38, 39, 40, 41, 43, 45, 47, 48, 51, 52, 54, 55, 57, 58 are similarly based on citations that bear no apparent relationship to the rejected claims.

The rejection of claim 7 asserts that D'Amico discloses the assignment of a first group of mobile stations to a first carrier with a periodic silence period, and the assignment of a second group to a second carrier without a periodic silence period. The cited portion of D'Amico describes an arrangement of base stations. The subject matter of claim 7 is not disclosed by D'Amico.

The rejection of claim 17 asserts that D'Amico discloses suspending transmission of power control commands on a forward link power control channel during the silence period. (Office Action, p. 4.) While the cited portion of D'Amico is generally directed to the transmission of SQM slots, including "silent" slots, D'Amico makes no reference at all to power control commands or forward link power control channels.

The rejection of claim 36 is based on its alleged correspondence to claim 2. (Office Action, p. 5.) In fact, the subject matter of claim 36 is completely distinct from claim 2. D'Amico does not disclose the subject matter of claim 36; the cited portion of D'Amico for claim 2 is completely unrelated to claim 36. Similarly, the rejection of claim 39 is based on its alleged

correspondence to an earlier-rejected; claim 39 does not in fact directly correspond to any earlier claim, and its subject matter is not disclosed by the cited references.

Conclusion

For at least the reasons given above, the rejections of all pending claims are improper and should be withdrawn. As demonstrated above (as well as in the previously submitted Applicant Response) D'Amico has virtually nothing in common with the presently claimed invention, and discloses none of the features of the independent claims. Voyer is also completely unrelated to the subject matter of the present invention and does not, in fact, disclose the single feature for which it was proffered. The present Office Action thus fails to provide support for the rejections of the pending independent claims. Furthermore, as discussed above, the rejections of most of the dependent are based on citations to D'Amico that have no discernable relationship to the subject matter of the dependent claims.

Applicant respectfully requests withdrawal of the present rejections and allowance of pending claims 1-58.

Respectfully submitted,

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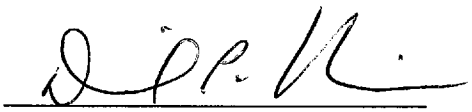

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